## ABSTRACT

A method for preparing fine particles of a high brightness luminescent material improved in crystallinity; and a high brightness luminescent material prepared by the method. In an embodiment, $BaMgAl_{10}O_{17}$:Eu (BAM) as a high brightness luminescent material is prepared by a method which comprises providing an aqueous solution containing an aluminum alcoholate and water-soluble compounds of barium, magnesium and europium, adding an acid to the aqueous solution to form an acidic solution, heating the acidic solution to ca.900°C and conducting a calcination at the temperature for a short time, and subsequently, firing the calcined product at a temperature higher than that for the calcination, for example, 1400°C or higher. The method allows the preparation of BAM which comprises spherical fine particles having a pure phase and being improved in crystallinity, and thus is reduced in the deterioration by heat or VUV.